

FAST LTA

Zero Loss Secondary Storage

For large VTL-archives

Silent Bricks.



with  from Munich

Fast and reliable alternative to traditional tape libraries:

Large VTL archives with the Silent Brick system.

The Silent Brick System as VTL is the modern alternative to conventional tape libraries. Fast, random access, integrated data protection and long, low-maintenance running times – at low energy costs.

Tape libraries have been used as “cold archives” for decades. However, current applications increasingly require active archives with fast, random access without expensive, additional cache architecture.

The Silent Brick System as VTL retains the advantages of tape libraries, such as energy efficiency and offline capabilities, but eliminates compromises in performance and security due to linear access and lack of redundancy. In addition, savings can often be made on the disk cache that was previously required.

And thanks to 1:1 compatibility with your tape library, you can migrate your libraries during operation, without downtime, without risk, and without changes to your software connection and workflows.

Sprinter: Silent Bricks are based on NVMe or hard drives and offer random access to your data. The connection via FC/iSCSI or 100G Ethernet guarantees the highest transfer speeds.

Dataprotector: Silent Bricks protect your data using 12/8 Erasure Coding – up to 4 of the 12 data carriers can fail without any data being lost. The automatic digital audit regularly checks all data for integrity.

Energy-saver: Individual Silent Bricks can be switched off almost completely and therefore consume almost no energy – yet are fully available again within fractions of a second.

Migration assistant: Since the VTL is 1:1 compatible with existing tape libraries, separate libraries can be used in parallel during migration, which prevents downtime, minimises risks and does not require any changes, for example, to the HSM software.

- 1 Data transfer**
via fast 100G Ethernet or FC/iSCSI
- 2 Parallel operation**
thanks to tape emulation without software changes
- 3 Data validation**
with direct access, without cache system
- 4 Switching over**
and deactivating the old library

Flexible, secure & fast:

The Silent Brick system for large VTL-archives

Controller X

The Controller X forms the heart of the Silent Brick system. It can be expanded externally via Dual-SAS with Silent Brick Max Air to more than 6 PB. Internally, there are up to 8 slots available for Silent Brick Pro. Connection is via 10G or 100G Ethernet or optionally via Fibre Channel & iSCSI.



NEW: Silent Brick Max Air

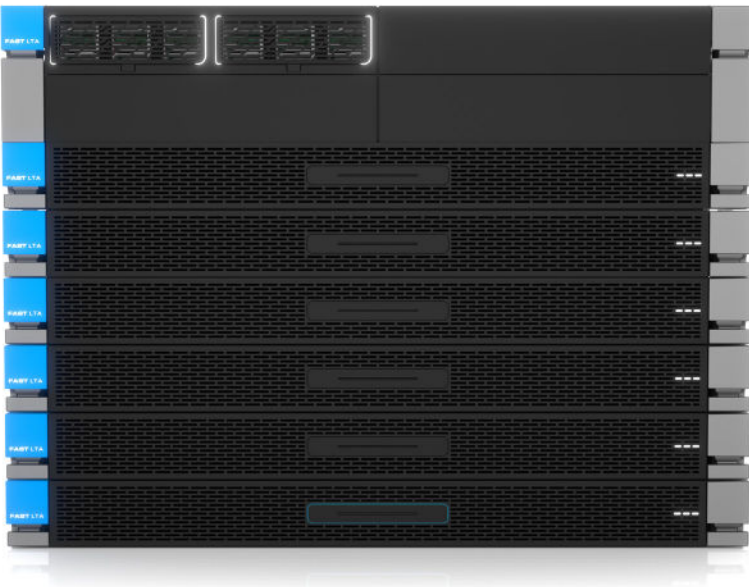
Per HE, the Silent Brick Max Air offers 48, 96 or 240 TB (gross). The 12 hard drives (hot swappable) are connected via Erasure Coding with quadruple redundancy, thus protecting against data loss. When not in use, the Silent Brick Max Air can be switched off almost completely and even controls a real air gap.

Silent Brick Pro

For additional applications that require the highest performance, the Silent Brick Pro with 12x NVMe modules offers the highest data speeds and a capacity of up to 96 TB (gross).

Silent Brick OS

The Silent Brick system software provides seamless integration with your existing software and infrastructure through 1:1 emulation of a tape library. At the same time, volumes can also be configured as NAS (SMB/NFS) or S3. Management is convenient via a web interface.



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Petabyte-archive for satellite data:

Why the DLR chooses for VTL with Silent Bricks.



Challenges

The German Aerospace Centre (DLR) manages the German Satellite Data Archive (D-SDA) at the Earth Observation Centre (EOC) in Oberpfaffenhofen near Munich. Satellite data receiving stations located around the world send their data here, where it is stored and archived for the long term. The data from the rapidly growing archive is stored using a hierarchical storage management system. The two copies of the data must be based on different technologies. Because one of the two tape technologies used to date has been discontinued by the manufacturer, the DLR has opted for Silent Bricks from FAST LTA.

Solution: Silent Brick Controller and Silent Brick Max on multiple locations

Applications: Active VTL-archive with Quantum StorNext HSM

Partner: NAVUM GmbH



Photo: DLR

„Compared to the previous solution, we have observed significantly lower latency when reading data from the archive. This allows us to dispense with an additional copy on hard drives.“



Stephan Schropp, IT-Manager D-SDA, DLR

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